



AFCTN Test Report 94-130

AFCTB-ID
94-077



TMSS Parsing Test



MIL-M-87929A, Appendix H, ATE Operator Test Procedures



Document Type Definition

MAXIMA Corporation

DISA Contract #DCA100-93-D-0065



Quick Short Test Report

21 June 1994



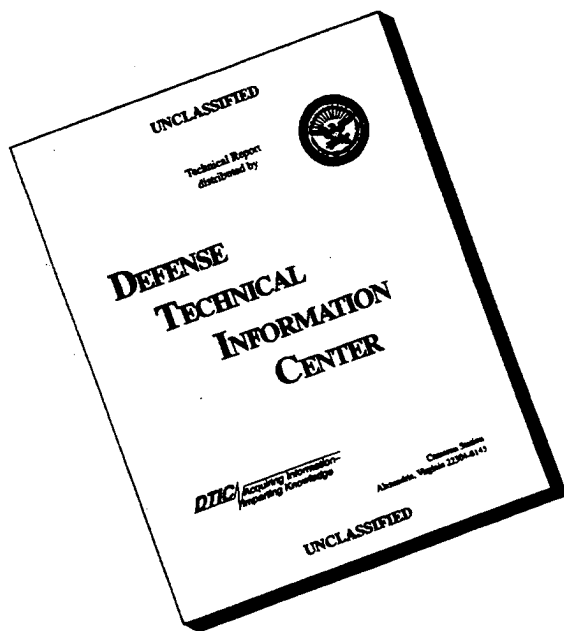
Prepared for
Electronic Systems Center
Air Force CALS Program Office
HQ ESC/AV-2
4027 Colonel Glenn Hwy Suite 300
Dayton OH 45431-1672

19960321 113

DISTRIBUTION STATEMENT A. Approved for public release; distribution is unlimited.

DTIC QUALITY INSPECTED 1

DISCLAIMER NOTICE



THIS DOCUMENT IS BEST QUALITY AVAILABLE. THE COPY FURNISHED TO DTIC CONTAINED A SIGNIFICANT NUMBER OF PAGES WHICH DO NOT REPRODUCE LEGIBLY.

AFCTN Test Report
94-130

AFCTB-ID
94-077

TMSS Parsing Test
MIL-M-87929A, Appendix H,
ATE Operator Test Procedures
Document Type Definition
For:
MAXIMA Corporation
DISA Contract #DCA100-93-D-0065

Quick Short Test Report

21 June 1994

Prepared By
Air Force CALS Test Bed
Wright-Patterson AFB, OH 45433

AFCTB Contact
Gary Lammers
(513) 427-2295

AFCTN Contact
Mel Lammers
(513) 427-2295

DISCLAIMER

This document was prepared as an account of the work sponsored by the Air Force. Neither the United States Government, the Air Force, nor any of their employees makes any warranty, expressed or implied, or assumes any legal liability or responsibility for the accuracy, completeness, or usefulness of any information, apparatus, product, or process disclosed, nor represents that its use would not infringe on privately owned rights. Reference herein to any specific commercial products, process, or service by trade name, trademark, manufacturer, or otherwise, does not necessarily constitute or imply its endorsement, recommendation, or favoring by the United States Government or the Air Force. The views and opinions of authors expressed herein do not necessarily state or reflect those of the United States Government or the Air Force, and shall not be used for advertising or product endorsement purposes.

Available to the public from the
National Technical Information Service
U.S. Department of Commerce
5285 Port Royal Road
Springfield, VA 22161

This report and those involved in its preparation do not endorse any product, process, or company stated herein. Use of these means by anyone does not imply certification by the Air Force CALS Test Network (AFCTN).

Air Force CALS Test Bed

Notification of Test Results

21 June 1994

This notice documents the results of an Air Force CALS Test Bed (AFCTB) Quick Short Test Report (QSTR) evaluation of data submitted by:

MAXIMA Corporation

Identified as follows:

Title:	MIL-M-87929A, Appendix H, ATE Operator Test Procedures, DTD Parsing Test
Program:	DISA
Program Office:	DISA
Contract No.:	DCA100-93-D-0065
QSTR No.:	AFCTB-ID 94-077

Received on the following media: **3.5" Diskette**

The results of the QSTR evaluation are as follows:

MIL-STD-1840A Media Format:	N/A
MIL-D-28000A IGES:	N/A
MIL-M-28001B SGML:	Fail
MIL-R-28002A Raster:	N/A
MIL-D-28003 CGM:	N/A

Formal results with associated disclaimer are documented and available from the AFCTB.

**Air Force CALS Test Bed
HQ ESC/AV-2P
4027 Colonel Glenn Highway, Suite 300
Dayton, OH 45431-1672
Phone: 513-257-3085 FAX: 513-257-5881**

Contents

1.	Introduction.....	1
1.1.	Background.....	1
1.2.	Purpose.....	2
2.	Test Parameters.....	3
3.	1840A Analysis.....	4
3.1.	External Packaging.....	4
4.	SGML Analysis.....	4
4.1.	Exoterica Validator.....	5
4.2.	Exoterica XGML Normalizer.....	6
4.3.	Public Domain sgmls.....	7
4.4.	Sema Mark-it.....	8
5.	Conclusions and Recommendations.....	9
6.	Appendix A - Detailed SGML Analysis.....	10
6.1.	Exoterica Validator	10
6.2.	Exoterica XGMLNormalizer Parser.....	17
6.3.	Public Domain sgmls Log.....	18
6.4.	Sema Mark-it Parser Log.....	21
6.5.	D929AG0.DTD.....	23

1. Introduction

1.1 Background

The Department of Defense (DoD) Air Force Continuous Acquisition and Life-cycle Support (CALS) Test Network (AFCTN) is conducting tests of the military standard for the Automated Interchange of Technical Information, MIL-STD-1840A, and its companion suite of military specifications. The AFCTN is a DoD sponsored confederation of voluntary participants from industry and government managed by the Electronic Systems Center (ESC).

The primary objective of the AFCTN is to evaluate the effectiveness of the CALS standards for technical data interchange and to demonstrate the technical capabilities and operational suitability of those standards. Two general categories of tests are performed to evaluate the standards; formal and informal.

Formal tests are large and comprehensive, which follow a written test plan, require specific authorization from the DoD, and may take months to prepare, execute, and report.

Informal tests are quick and short, used by the AFCTN technical staff, to broaden the testing base. They include representative samples of the many systems and applications used by AFCTN participants. They also allow the AFCTN staff to gain feedback from many industry and government interpretations of the standards, to increase the base of participation in the CALS initiative, and respond to the many requests for help that come from participants. Participants take part voluntarily, benefit by receiving an evaluation of their latest implementation (interpretation) of the standards, interact with the AFCTN technical staff, gain experience using the standards, and develop increased confidence in them. The results of informal tests are reported in Quick Short Test Reports (QSTRs) that briefly summarize the standard(s) tested, the hardware and software used, the nature of the test, and the results.

1.2 Purpose

The purpose of this informal test is to analyze Air Force Document Type Definitions (DTDs) for Standard Generalized Markup Language (SGML) syntax, using several commercial and public domain SGML parsers, prior to placing them in the Defense Information Systems Agency (DISA) Asset Source for Software Engineering Technology (ASSET) repository.

2. Test Parameters

Test Plan: AFCTB 94-077

Date of
Evaluation: 21 June 1994

Evaluator: George Elwood
Air Force CALS Test Bed
DET 2 HQ ESC/AV-2P
4027 Colonel Glenn Hwy
Suite 300
Dayton OH 45431-1672

Data
Originator: Kay Hill
MAXIMA Corporation
2372 Lakeview Drive
Beavercreek OH 45431
(513) 427-5888

Data
Description: Technical Manual Test
1 DTD

Data
Source System:

Text/SGML
SOFTWARE
Unknown

Evaluation Tools Used:

MIL-M-28001 (SGML)
PC 486/50
Exoterica XGMLNormalizer v1.2e3.2
Exoterica Validator v2.2 ex1
McAfee & McAdam Sema Mark-it v2.3
Public Domain sgmls 1.1

Standards
Tested: MIL-M-28001B

3. 1840A Analysis

3.1 External Packaging

The 3.5" diskette was hand delivered to the Air Force CALS Test Bed (AFCTB). It was not enclosed in any type of container.

The files received by the AFCTB were not MIL-STD-1840A. The files were not named per the standard conventions, as the stated purpose of the evaluation was the basic data structure.

4. SGML Analysis

The AFCTB has several parsers available for evaluating submitted DTD and text files. These tools are not used to generate a pass/fail but to report how commercially available software can handle the files. These products are used in the development of technical publications and are good indicators of usability. The use of these products is not an endorsement nor an indication of CALS capability. All operations were performed using the default settings unless specified in the report.

The goal was to configure the DTD under analysis as it would normally be used. However, for this analysis it was necessary to modify the DTD adding the "DOCTYPE doc [" statement to the start and the companion "]">" to the end of the DTD under evaluation, as stated in the comments of the DTD. If the parser did not support a formal file pointing to the location of the ISO character sets, this was added.

The DTD under evaluation MIL-M-87929A, Appendix H, ATE Operator Test Procedures,

<!-- MIL-M-87929A ATE Operator Test Procedures DTD -->

D929AH0.ORG --> D929AA0.ORG —> D807BA0.A1

└─> D784CB0.A3

The following notes apply to the parsing analysis as indicated in the ensuing paragraphs.

Note 1. Entity parameters defined more than once is a vaild SGML construct. The duplicate definition errors and/or warnings in this analysis do not indicate any problems.

Note 2. The occurrences of warnings "references defined, but not used," appeared because portions of the called DTD, i.e., MIL-M38784C, were not used. They were not used because the entity definitions of the DTD under analysis altered the execution path in the called DTD. The warnings in this analysis do not indicate any problems.

4.1 Exoterica Validator

The DTD file was evaluated using the *Exoterica Validator* exl parser. The basic DTD was modified by placing the concrete syntax file and "<!DOCTYPE doc [" at the start and the "]">" at the end. No errors were reported by the parser. The TOTAL CAPACITY was increased to 250000 for this set of DTDs after receiving messages about exceeding capacities.

The parser reported 99 total warnings. The warnings were of three types. The first type warning was a parameter entity declared more than once. See Note 1 above.

```
<!-- **Warning** in "c:\ws\929a.dtd" (entity "%m87929a"), line 83,
      used in "\xgml\9477.dtd", line 120:
      A parameter entity name has been declared more than once.
      The entity is "%list".
      <!ENTITY % list "(seqlist | randlist | deflist)" >
      ****
-->
```

The second type warning related to elements defined but not used in any content model. See Note 2 above.

```
<!-- **Warning** in "\xgml\9477.dtd", line 198:
  An element is not allowed in the document instance because it does not
  appear in any accessible content model or it is completely excluded.
  The element is "APPENDIX".
-->
```

The third type warning was an element used but not defined. This warning indicates an error in the DTD syntax.

```
<!-- **Warning** in "\xgml\9477.dtd", line 198:
  An element name specified in a USEMAP declaration, ATTLIST declaration or
  content model is not defined by an ELEMENT declaration.
  The element name is "UNIT".
-->
```

4.2 Exoterica XGML Normalizer

The DTD file was parsed using the Exoterica *XGMLNormalizer* parser. The concrete syntax and "<!DOCTYPE doc [" were added to the start and "]">" to the end of the file. One warning was issued by this utility for an element used but not defined.

```
C:\XGML\XGMLNORM.EXE --
Warning on line 198 in file 9477.dtd:
An undeclared element name was used in a content model.
The element is 'UNIT'.
```

4.3 Public Domain sgmls

The DTD file was evaluated using the Public Domain *sgmls* parser version 1.1. The file was modified by adding the "<!DOCTYPE doc [" to the start and "]">" to the end of the file as stated in the comments in the DTD. The D929AA0.ORG, D807BA0.A1 and D784CB0.A3 files were used as the point to files. The parser reported one error. The reported error was a TOTCAP exceeded. It was reported as 234944.

sgmls: SGML error:
Capacity limit TOTALCAP exceeded by 34944 points

The parser reported 25 total warnings of two types. The first type warning was duplicate definitions. See Note 1 above.

sgmls: In file included at \ws\9477.dtd, line 47:
Warning at c:\ws\929a.dtd, line 83 in declaration parameter 4:
Duplicate specification occurred for "%list"; duplicate ignored

The second type warning related to an element used but not defined. This warning indicates an error in the DTD syntax.

sgmls: Warning at \ws\9477.dtd, line 125 at record end:
Element "UNIT" used in DTD but not defined

4.4 Sema Mark-it

The DTD file was evaluated using McAfee & McAdam's Sema Mark-it v2.3 parser. The file was modified by adding the concrete syntax and "<!DOCTYPE doc [" to the start and "]">" to the end of the file. The parser reported errors that did not appear to be consistent with the rest of the parsers. The files used were the exact files parsed by the Exoterica parsers.

The parser got lost while trying to find the 929a file. The text appeared to be the same as the previous 929 series DTDs.

```
<!--*** file:\xgml\9478.dtd line:303 pos:10776
Unknown parameter entity name (wp) used in reference.
If name is spelt correctly check that the entity declaration in the
DTD contains a PERO (e.g. %) symbol followed by a space.-->
```

5. Conclusions and Recommendations

The file D929AH0.ORG, MIL-M-87929A, Appendix H, ATE Operator Test Procedures, does not conform to the SGML syntax of ISO Standard 8879, as required by the CALS MIL-M-28001B specification. This conclusion is derived from the parser test warnings which indicate elements are used that are not defined.

6. Appendix A - Detailed SGML Analysis

6.1 Exoterica Validator

```
<!-- **Warning** in "c:\ws\929a.dtd" (entity "%m87929a"), line 83,
      used in "\xgml\9477.dtd", line 120:
      A parameter entity name has been declared more than once.
      The entity is "%list".
      <!ENTITY % list "(seqlist | randlist | deflist)" >
      ~~~~
-->
<!-- **Warning** in "c:\ws\929a.dtd" (entity "%m87929a"), line 85,
      used in "\xgml\9477.dtd", line 120:
      A parameter entity name has been declared more than once.
      The entity is "%spcpara".
      <!ENTITY % spcpara "(warning?, caution?, note?)" >
      ~~~~~~
-->
<!-- **Warning** in "c:\ws\929a.dtd" (entity "%m87929a"), line 87,
      used in "\xgml\9477.dtd", line 120:
      A parameter entity name has been declared more than once.
      The entity is "%fpi".
      <!ENTITY % fpi "(para0, (para0 | %list; | symsect | abbrsect | %spcpara;)*,
      ~~~
-->
<!-- **Warning** in "c:\ws\929a.dtd" (entity "%m87929a"), line 90,
      used in "\xgml\9477.dtd", line 120:
      A parameter entity name has been declared more than once.
      The entity is "%forwp".
      <!ENTITY % forwp "(wpidinfo, contents, illuslist?, tablelist?, purpose, sco
      ~~~~~
-->
<!-- **Warning** in "c:\ws\929a.dtd" (entity "%m87929a"), line 94,
      used in "\xgml\9477.dtd", line 120:
      A parameter entity name has been declared more than once.
      The entity is "%sttec".
      <!ENTITY % sttec "(wpidinfo, para0, (toollist, para0*)?, (eqplist, para0*)?
      ~~~~~
-->
<!-- **Warning** in "c:\ws\807b.dtd" (entity "%m38807b"), line 31,
      used in "c:\ws\929a.dtd" (entity "%m87929a"), line 205,
      used in "\xgml\9477.dtd", line 120:
      A parameter entity name has been declared more than once.
      The entity is "%frnt".
      <!ENTITY % frnt "(idinfo, lep, verstat?, contents)" >
      ~~~~
```

```
<!-- **Warning** in "c:\ws\807b.dtd" (entity "%m38807b"), line 45,
      used in "c:\ws\929a.dtd" (entity "%m87929a"), line 205,
      used in "\xgml\9477.dtd", line 120:
      A parameter entity name has been declared more than once.
      The entity is "%yesorno".
      <!ENTITY % yesorno "NUMBER" >
      ~~~~~

-->

<!-- **Warning** in "c:\ws\807b.dtd" (entity "%m38807b"), line 88,
      used in "c:\ws\929a.dtd" (entity "%m87929a"), line 205,
      used in "\xgml\9477.dtd", line 120:
      A parameter entity name has been declared more than once.
      The entity is "%ipbforwd".
      <!ENTITY % ipbforwd "(modelcover, serialization?, finding?, simassem?,
      ~~~~~

-->

<!-- **Warning** in "i:\dtd\784c.dtd" (entity "%m38784c"), line 18,
      used in "c:\ws\807b.dtd" (entity "%m38807b"), line 103,
      used in "c:\ws\929a.dtd" (entity "%m87929a"), line 205,
      used in "\xgml\9477.dtd", line 120:
      A parameter entity name has been declared more than once.
      The entity is "%math".
      <!ENTITY % math "IGNORE" >
      ~~~~~

-->

<!-- **Warning** in "i:\dtd\784c.dtd" (entity "%m38784c"), line 33,
      used in "c:\ws\807b.dtd" (entity "%m38807b"), line 103,
      used in "c:\ws\929a.dtd" (entity "%m87929a"), line 205,
      used in "\xgml\9477.dtd", line 120:
      A parameter entity name has been declared more than once.
      The entity is "%mathtxt".
      <!ENTITY % mathtxt " " >
      ~~~~~

-->

<!-- **Warning** in "i:\dtd\784c.dtd" (entity "%m38784c"), line 37,
      used in "c:\ws\807b.dtd" (entity "%m38807b"), line 103,
      used in "c:\ws\929a.dtd" (entity "%m87929a"), line 205,
      used in "\xgml\9477.dtd", line 120:
      A parameter entity name has been declared more than once.
      The entity is "%shortitleuse".
      <!ENTITY % shortitleuse "IGNORE" >
      ~~~~~

-->
```

```
<!-- **Warning** in "i:\dtd\784c.dtd" (entity "%m38784c"), line 45,
      used in "c:\ws\807b.dtd" (entity "%m38807b"), line 103,
      used in "c:\ws\929a.dtd" (entity "%m87929a"), line 205,
      used in "\xgml\9477.dtd", line 120:
```

```
A parameter entity name has been declared more than once.
The entity is "%shorttitle".
```

```
<!ENTITY % shorttitle " " >
```

```
-->
```

```
<!-- **Warning** in "i:\dtd\784c.dtd" (entity "%m38784c"), line 47,
      used in "c:\ws\807b.dtd" (entity "%m38807b"), line 103,
      used in "c:\ws\929a.dtd" (entity "%m87929a"), line 205,
      used in "\xgml\9477.dtd", line 120:
```

```
A parameter entity name has been declared more than once.
The entity is "%yesorno".
```

```
<!ENTITY % yesorno "NUMBER" >
```

```
-->
```

```
<!-- **Warning** in "i:\dtd\784c.dtd" (entity "%m38784c"), line 50,
      used in "c:\ws\807b.dtd" (entity "%m38807b"), line 103,
      used in "c:\ws\929a.dtd" (entity "%m87929a"), line 205,
      used in "\xgml\9477.dtd", line 120:
```

```
A parameter entity name has been declared more than once.
The entity is "%itemid".
```

```
<!ENTITY % itemid
```

```
-->
```

```
<!-- **Warning** in "i:\dtd\784c.dtd" (entity "%m38784c"), line 62,
      used in "c:\ws\807b.dtd" (entity "%m38807b"), line 103,
      used in "c:\ws\929a.dtd" (entity "%m87929a"), line 205,
      used in "\xgml\9477.dtd", line 120:
```

```
A parameter entity name has been declared more than once.
The entity is "%content".
```

```
<!ENTITY % content
```

```
-->
```

```
<!-- **Warning** in "i:\dtd\784c.dtd" (entity "%m38784c"), line 71,
      used in "c:\ws\807b.dtd" (entity "%m38807b"), line 103,
      used in "c:\ws\929a.dtd" (entity "%m87929a"), line 205,
      used in "\xgml\9477.dtd", line 120:
```

```
A parameter entity name has been declared more than once.
The entity is "%bodyatt".
```

```
<!ENTITY % bodyatt
```

```
-->
```

```
<!-- **Warning** in "i:\dtd\784c.dtd" (entity "%m38784c"), line 82,
      used in "c:\ws\807b.dtd" (entity "%m38807b"), line 103,
      used in "c:\ws\929a.dtd" (entity "%m87929a"), line 205,
      used in "\xgml\9477.dtd", line 120:
A parameter entity name has been declared more than once.
The entity is "%list".
<!ENTITY % list "(seqlist | randlist | deflist)" >
      ~~~~

-->
<!-- **Warning** in "i:\dtd\784c.dtd" (entity "%m38784c"), line 86,
      used in "c:\ws\807b.dtd" (entity "%m38807b"), line 103,
      used in "c:\ws\929a.dtd" (entity "%m87929a"), line 205,
      used in "\xgml\9477.dtd", line 120:
A parameter entity name has been declared more than once.
The entity is "%spcpara".
<!ENTITY % spcpara "(warning?, caution?, note?)" >
      ~~~~~~

-->
<!-- **Warning** in "i:\dtd\784c.dtd" (entity "%m38784c"), line 107,
      used in "c:\ws\807b.dtd" (entity "%m38807b"), line 103,
      used in "c:\ws\929a.dtd" (entity "%m87929a"), line 205,
      used in "\xgml\9477.dtd", line 120:
A parameter entity name has been declared more than once.
The entity is "%frnt".
<!ENTITY % frnt "(idinfo, warnpage?, chginssht?, lep, verstat?,
      ~~~~

-->
<!-- **Warning** in "i:\dtd\784c.dtd" (entity "%m38784c"), line 117,
      used in "c:\ws\807b.dtd" (entity "%m38807b"), line 103,
      used in "c:\ws\929a.dtd" (entity "%m87929a"), line 205,
      used in "\xgml\9477.dtd", line 120:
A parameter entity name has been declared more than once.
The entity is "%fpi".
<!ENTITY % fpi "(para0, (para0 | %list; | symsect | abbrsect |
      ~~~

-->
<!-- **Warning** in "i:\dtd\784c.dtd" (entity "%m38784c"), line 126,
      used in "c:\ws\807b.dtd" (entity "%m38807b"), line 103,
      used in "c:\ws\929a.dtd" (entity "%m87929a"), line 205,
      used in "\xgml\9477.dtd", line 120:
A parameter entity name has been declared more than once.
The entity is "%titles".
<!ENTITY % titles "title %shorttitle;" >
      ~~~~~~

-->
```

```
<!-- **Warning** in "i:\dtd\784c.dtd" (entity "%m38784c"), line 133,
      used in "c:\ws\807b.dtd" (entity "%m38807b"), line 103,
      used in "c:\ws\929a.dtd" (entity "%m87929a"), line 205,
      used in "\xgml\9477.dtd", line 120:
```

```
A parameter entity name has been declared more than once.
```

```
The entity is "%fig".
```

```
<!ENTITY % fig "(%titles;; (subfig+ | (graphic | macrograph |
```

```
-->
```

```
<!-- **Warning** in "i:\dtd\784c.dtd" (entity "%m38784c"), line 165,
      used in "c:\ws\807b.dtd" (entity "%m38807b"), line 103,
      used in "c:\ws\929a.dtd" (entity "%m87929a"), line 205,
      used in "\xgml\9477.dtd", line 120:
```

```
A parameter entity name has been declared more than once.
```

```
The entity is "%bodyele".
```

```
<!ENTITY % bodyele "(chapter, chapter+, ddchapter?)" >
```

```
-->
```

```
<!-- **Warning** in "i:\dtd\784c.dtd" (entity "%m38784c"), line 190,
      used in "c:\ws\807b.dtd" (entity "%m38807b"), line 103,
      used in "c:\ws\929a.dtd" (entity "%m87929a"), line 205,
      used in "\xgml\9477.dtd", line 120:
```

```
A parameter entity name has been declared more than once.
```

```
The entity is "%graphatt".
```

```
<!ENTITY % graphatt
```

```
-->
```

```
<!-- **Warning** in "i:\dtd\784c.dtd" (entity "%m38784c"), line 228,
      used in "c:\ws\807b.dtd" (entity "%m38807b"), line 103,
      used in "c:\ws\929a.dtd" (entity "%m87929a"), line 205,
      used in "\xgml\9477.dtd", line 120:
```

```
A parameter entity name has been declared more than once.
```

```
The entity is "%entryatt".
```

```
<!ENTITY % entryatt
```

```
-->
```

```
<!-- **Warning** in "i:\dtd\784c.dtd" (entity "%m38784c"), line 248,
      used in "c:\ws\807b.dtd" (entity "%m38807b"), line 103,
      used in "c:\ws\929a.dtd" (entity "%m87929a"), line 205,
      used in "\xgml\9477.dtd", line 120:
```

```
A parameter entity name has been declared more than once.
```

```
The entity is "%lrp".
```

```
<!ENTITY % lrp "(tmidno, title)+>
```

```
-->
```

<!-- **Warning** in "\xgml\9477.dtd", line 198:

An element is not allowed in the document instance because it does not appear in any accessible content model or it is completely excluded.

The element is "APPENDIX".

-->

The element is "BODY".
The element is "CHAPTER".
The element is "CHGINSSHT".
The element is "CHGLIST".
The element is "CHGREC".
The element is "DATE".
The element is "DATEINC".
The element is "DDCHAPTER".
The element is "DDDESC".
The element is "DDINDEX".
The element is "DDINTRO".
The element is "DDLIST".
The element is "DESC".
The element is "DOC".
The element is "DOCIPB".
The element is "DOCPART".
The element is "DOCWP".
The element is "ECPNO".
The element is "ESDS".
The element is "FIGINDEX".
The element is "FINDING".
The element is "FOREWORD".
The element is "GLOSSARY".
The element is "HCI".
The element is "INDEX".
The element is "INSERTPG".
The element is "INTRO".
The element is "IPBFORWORD".
The element is "IPBWP".
The element is "MFRLIST".
The element is "MODELCOVER".
The element is "NUMINDX".
The element is "PARTNAME".
The element is "PARTSTD".
The element is "PENAPP".
The element is "PGNO".
The element is "PL".
The element is "PLO".
The element is "PL1".
The element is "PL2".
The element is "PL3".
The element is "PL4".

The element is "PL5".
The element is "PL6".
The element is "PL7".
The element is "PREFACE".
The element is "QUICKCHGEXPL".
The element is "RATD".
The element is "REAR".
The element is "REINTEST".
The element is "REMARKS".
The element is "REMOVEPG".
The element is "REPTTEST".
The element is "RFDSINDX".
The element is "SECTION".
The element is "SERIALIZATION".
The element is "SERTABLE".
The element is "SHORTTITLE".
The element is "SHTNOEXPL".
The element is "SIMASSEM".
The element is "SMRCODE".
The element is "SMREXPL".
The element is "SSSN".
The element is "TYPENO".

-->

<!-- **Warning** in "\xgml\9477.dtd", line 198:

An element name specified in a USEMAP declaration, ATTLIST declaration or
content model is not defined by an ELEMENT declaration.
The element name is "UNIT".

-->

The element is "UNITS".
The element is "USEONCODE".
The element is "USEONCODELIST".
The element is "USEONEXPL".
The element is "VOLUME".
The element is "WARNPAGE".
The element is "WP".

-->

```
<!-- Capacity points/limits:
      TOTALCAP =237968/250000
      ENTCAP   =13536/200000
      ENTCHCAP =20131/70000
      ELEMCAP  =9056/70000
      GRPCAP   =69216/70000
      EXGRPCAP =1632/70000
      EXNMCAP  =4224/70000
      ATTCAP   =84672/200000
      ATTCHCAP =2058/70000
      AVGRPCAP =33184/70000
      NOTCAP   =96/70000
      NOTCHCAP =163/70000
      IDCAP    =0/70000
      IDREFCAP =0/70000
      MAPCAP   =0/70000
      LKSETCAP =0/70000
      LKNMCAP  =0/70000
```

-->

<!-- 110 errors and 99 warnings reported. -->

6.2 Exoterica XGMLNormalizer Parser

C:\XGML\XGMLNORM.EXE --

Warning on line 198 in file 9477.dtd:

An undeclared element name was used in a content model.

The element is 'UNIT'.

6.3 Public Domain sgmls Log

sgmls: In file included at \ws\9477.dtd, line 47:
Warning at c:\ws\929a.dtd, line 83 in declaration parameter 4:
Duplicate specification occurred for "%list"; duplicate ignored

sgmls: In file included at \ws\9477.dtd, line 47:
Warning at c:\ws\929a.dtd, line 85 in declaration parameter 4:
Duplicate specification occurred for "%spcpara"; duplicate ignored

sgmls: In file included at \ws\9477.dtd, line 47:
Warning at c:\ws\929a.dtd, line 88 in declaration parameter 4:
Duplicate specification occurred for "%fpi"; duplicate ignored

sgmls: In file included at \ws\9477.dtd, line 47:
Warning at c:\ws\929a.dtd, line 92 in declaration parameter 4:
Duplicate specification occurred for "%forwp"; duplicate ignored

sgmls: In file included at \ws\9477.dtd, line 47:
Warning at c:\ws\929a.dtd, line 95 in declaration parameter 4:
Duplicate specification occurred for "%sttec"; duplicate ignored

sgmls: In file included at \ws\9477.dtd, line 47:
In file included at c:\ws\929a.dtd, line 205:
Warning at c:\ws\807b.dtd, line 31 in declaration parameter 4:
Duplicate specification occurred for "%frnt"; duplicate ignored

sgmls: In file included at \ws\9477.dtd, line 47:
In file included at c:\ws\929a.dtd, line 205:
Warning at c:\ws\807b.dtd, line 45 in declaration parameter 4:
Duplicate specification occurred for "%yesorno"; duplicate ignored

sgmls: In file included at \ws\9477.dtd, line 47:
In file included at c:\ws\929a.dtd, line 205:
Warning at c:\ws\807b.dtd, line 90 in declaration parameter 4:
Duplicate specification occurred for "%ipbforwd"; duplicate ignored

sgmls: In file included at \ws\9477.dtd, line 47:
In file included at c:\ws\929a.dtd, line 205:
In file included at c:\ws\807b.dtd, line 103:
Warning at i:\dtd\784c.dtd, line 18 in declaration parameter 4:
Duplicate specification occurred for "%math"; duplicate ignored

sgmls: In file included at \ws\9477.dtd, line 47:
In file included at c:\ws\929a.dtd, line 205:
In file included at c:\ws\807b.dtd, line 103:
Warning at i:\dtd\784c.dtd, line 33 in declaration parameter 4:
Duplicate specification occurred for "%mathtxt"; duplicate ignored

sgmls: In file included at \ws\9477.dtd, line 47:
In file included at c:\ws\929a.dtd, line 205:
In file included at c:\ws\807b.dtd, line 103:
Warning at i:\dtd\784c.dtd, line 37 in declaration parameter 4:
Duplicate specification occurred for "%shortitleuse"; duplicate ignored

sgmls: In file included at \ws\9477.dtd, line 47:
In file included at c:\ws\929a.dtd, line 205:
In file included at c:\ws\807b.dtd, line 103:

Warning at i:\dtd\784c.dtd, line 45 in declaration parameter 4:
Duplicate specification occurred for "%shorttitle"; duplicate ignored

sgmls: In file included at \ws\9477.dtd, line 47:
In file included at c:\ws\929a.dtd, line 205:
In file included at c:\ws\807b.dtd, line 103:
Warning at i:\dtd\784c.dtd, line 47 in declaration parameter 4:
Duplicate specification occurred for "%yesorno"; duplicate ignored

sgmls: In file included at \ws\9477.dtd, line 47:
In file included at c:\ws\929a.dtd, line 205:
In file included at c:\ws\807b.dtd, line 103:
Warning at i:\dtd\784c.dtd, line 60 in declaration parameter 4:
Duplicate specification occurred for "%itemid"; duplicate ignored

sgmls: In file included at \ws\9477.dtd, line 47:
In file included at c:\ws\929a.dtd, line 205:
In file included at c:\ws\807b.dtd, line 103:
Warning at i:\dtd\784c.dtd, line 69 in declaration parameter 4:
Duplicate specification occurred for "%content"; duplicate ignored

sgmls: In file included at \ws\9477.dtd, line 47:
In file included at c:\ws\929a.dtd, line 205:
In file included at c:\ws\807b.dtd, line 103:
Warning at i:\dtd\784c.dtd, line 80 in declaration parameter 4:
Duplicate specification occurred for "%bodyatt"; duplicate ignored

sgmls: In file included at \ws\9477.dtd, line 47:
In file included at c:\ws\929a.dtd, line 205:
In file included at c:\ws\807b.dtd, line 103:
Warning at i:\dtd\784c.dtd, line 82 in declaration parameter 4:
Duplicate specification occurred for "%list"; duplicate ignored

sgmls: In file included at \ws\9477.dtd, line 47:
In file included at c:\ws\929a.dtd, line 205:
In file included at c:\ws\807b.dtd, line 103:
Warning at i:\dtd\784c.dtd, line 86 in declaration parameter 4:
Duplicate specification occurred for "%spcpara"; duplicate ignored

sgmls: In file included at \ws\9477.dtd, line 47:
In file included at c:\ws\929a.dtd, line 205:
In file included at c:\ws\807b.dtd, line 103:
Warning at i:\dtd\784c.dtd, line 109 in declaration parameter 4:
Duplicate specification occurred for "%frnt"; duplicate ignored

sgmls: In file included at \ws\9477.dtd, line 47:
In file included at c:\ws\929a.dtd, line 205:
In file included at c:\ws\807b.dtd, line 103:
Warning at i:\dtd\784c.dtd, line 118 in declaration parameter 4:
Duplicate specification occurred for "%fpi"; duplicate ignored

sgmls: In file included at \ws\9477.dtd, line 47:
In file included at c:\ws\929a.dtd, line 205:
In file included at c:\ws\807b.dtd, line 103:
Warning at i:\dtd\784c.dtd, line 126 in declaration parameter 4:
Duplicate specification occurred for "%titles"; duplicate ignored

sgmls: In file included at \ws\9477.dtd, line 47:

In file included at c:\ws\929a.dtd, line 205:
In file included at c:\ws\807b.dtd, line 103:
Warning at i:\dtd\784c.dtd, line 134 in declaration parameter 4:
Duplicate specification occurred for "%fig"; duplicate ignored
sgmls: In file included at \ws\9477.dtd, line 47:
In file included at c:\ws\929a.dtd, line 205:
In file included at c:\ws\807b.dtd, line 103:
Warning at i:\dtd\784c.dtd, line 165 in declaration parameter 4:
Duplicate specification occurred for "%bodyele"; duplicate ignored
sgmls: In file included at \ws\9477.dtd, line 47:
In file included at c:\ws\929a.dtd, line 205:
In file included at c:\ws\807b.dtd, line 103:
Warning at i:\dtd\784c.dtd, line 204 in declaration parameter 4:
Duplicate specification occurred for "%graphatt"; duplicate ignored
sgmls: In file included at \ws\9477.dtd, line 47:
In file included at c:\ws\929a.dtd, line 205:
In file included at c:\ws\807b.dtd, line 103:
Warning at i:\dtd\784c.dtd, line 238 in declaration parameter 4:
Duplicate specification occurred for "%entryatt"; duplicate ignored
sgmls: In file included at \ws\9477.dtd, line 47:
In file included at c:\ws\929a.dtd, line 205:
In file included at c:\ws\807b.dtd, line 103:
Warning at i:\dtd\784c.dtd, line 248 in declaration parameter 4:
Duplicate specification occurred for "%lrp"; duplicate ignored
sgmls: Warning at \ws\9477.dtd, line 125 at record end:
Element "UNIT" used in DTD but not defined
sgmls: SGML error:
Capacity limit TOTALCAP exceeded by 34944 points

TOTALCAP 234944
ENTCAP 13536
ENTCHCAP 17075
ELEMCA 9056
GRPCAP 69216
EXGRPCAP 1664
EXNMCA 4224
ATTCAP 84672
ATTCHCAP 2058
AVGRPCAP 33184
NOTCAP 96
NOTCHCAP 163
IDCAP 0
IDREFCAP 0
MAPCAP 0
LKSETCAP 0
LKNMCA 0

6.4 Sema Mark-it Parser Log

<!--*** file:\xgml\9478.dtd line:303 pos:10776
Unknown parameter entity name (wp) used in reference.
If name is spelt correctly check that the entity declaration in the
DTD contains a PERO (e.g. %) symbol followed by a space.-->

<!--*** file:\xgml\9478.dtd line:303 pos:10779
Syntax error. Valid tokens at this point are: Ee s pero dtgo name grpo
rniPCDATA .-->

<!--*** file:\xgml\9478.dtd line:303 pos:10810
Syntax error. Valid tokens at this point are: Ee s mdo_mdc mdo_com pio
mdo_dso pero msc_mdc dsc mdoNOTATION mdoENTITY mdoELEMENT mdoSHORTREF
mdoATTLIST mdoUSEMAP .-->

<!--*** file:\xgml\9478.dtd line:304 pos:10850
Syntax error. Valid tokens at this point are: Ee s mdo_mdc mdo_com pio
mdo_dso pero msc_mdc dsc mdoNOTATION mdoENTITY mdoELEMENT mdoSHORTREF
mdoATTLIST mdoUSEMAP .-->

<!--*** file:\xgml\9478.dtd line:304 pos:10865
Syntax error. Valid tokens at this point are: Ee s mdo_mdc mdo_com pio
mdo_dso pero msc_mdc dsc mdoNOTATION mdoENTITY mdoELEMENT mdoSHORTREF
mdoATTLIST mdoUSEMAP .-->

<!--*** file:\xgml\9478.dtd line:304 pos:10874
Syntax error. Valid tokens at this point are: Ee s mdo_mdc mdo_com pio
mdo_dso pero msc_mdc dsc mdoNOTATION mdoENTITY mdoELEMENT mdoSHORTREF
mdoATTLIST mdoUSEMAP .-->

<!--*** file:\xgml\9478.dtd line:306 pos:10964
Illegal end of entity within a delimited text (e.g. a declaration).
ISO 8879 prohibits declarations that start in one entity and end in
another.-->

ATTCNT --100-- 47
ATTSPLN --960-- 0
BSEQLEN --960-- 0
DTAGLEN --16-- 0
DTEMPLN --16-- 0
ENTLVL --16-- 3
GRPCNT --32-- 22
GRPGTCNT --96-- 27
GRPLVL --16-- 5
LITLEN --3048-- 730
NAMELEN --32-- 13

NORMSEP --2-- 0
PILEN --240-- 0
TAGLEN --960-- 0
TAGLVL --24-- 0
MSDLVL --24-- 1
TOTALCAP --350000-- 174501
ENTCAP --200000-- 16896
ENTCHCAP --70000-- 14902
ELEMCAP --70000-- 6496
GRPCAP --125000-- 47616
EXGRPCAP --70000-- 896
EXNMCAP --70000-- 1472
ATTCAP --200000-- 61568
ATTCHCAP --70000-- 1487
AVGRPCAP --70000-- 22912
NOTCAP --70000-- 96
NOTCHCAP --70000-- 160
IDCAP --70000-- 0
IDREFCAP --70000-- 0
MAPCAP --70000-- 0
LKSETCAP --70000-- 0
LKNMCP --70000-- 0

6.5 D929AG0.DTD

<!-- ***** START OF FILE ***** -->

<!-- SUPPLEMENT NOTICE: This file is made available to provide the user with a digital representation of the DTD found in Appendix H of MIL-M-87929A. This file is incomplete without MIL-M-87929A. -->

<!-- NOTE: The start and end of this file are marked with a row of asterisks. If these rows are not present the file may not be complete! -->

<!-- MIL-M-87929A ATE Operator Test Procedures DTD -->

<!-- The following set of declarations may be referred to by using a public entity as follows:

<!ENTITY % m87929ate PUBLIC "-//USA-DOD//DTD MIL-M-87929A ATE//EN" >
%m87929ate;
-->

<!-- NOTE: In order to parse the following DTD subset alone, append the following statement to the beginning of the file:

<!DOCTYPE docate [

and the associated "]>" to the end of the file. -->

<!-- ENTITY DECLARATIONS -->

<!ENTITY % m87929a PUBLIC "-//DOD-USA//DTD MIL-M-87929A//EN" >

<!ENTITY % list "(seqlist | randlist | deflist)" >

<!ENTITY % spcpara "(warning?, caution?, note?)" >

<!ENTITY % fpi "(para0, (para0 | %list; | symsect | abbrsect | %spcpara;)*, internatlstd?, lrp?, tctolist?)" >

<!ENTITY % forwp "(wpidinfo, contents, illuslist?, tablelist?, purpose, scope, %fpi;, manstru, coverage?, indexscheme, locinfo, para0*, leadpartic, maintcon?, envcont?, warrprov?, useapplic, statutil, caplim, oppartic, para0*, tmimprep?)" >

<!ENTITY % sttec "(wpidinfo, para0, (toollist, para0*)?, (eqplist, para0*)?, (consum, para0*)?, contlist?, software, para0*)" >

%m87929a;

<!-- ELEMENT and ATTRIBUTE LIST DECLARATIONS -->

<!ELEMENT ate - o (partno, refdes) >
<!ATTLIST ate %secur; >

<!ELEMENT caplim - o (%parazero;) >
<!ATTLIST caplim tocentry %yesorno; "1"
shortentry %yesorno; "0"
verified %yesorno; "0"
%bodyatt;
%secur; >

<!ELEMENT cpin - o (%text;) >
<!ATTLIST cpin %secur; >

<!ELEMENT docate - - (front, aiwp, forewordwp, sttecwp, testwp+,
ddwp?, foldsect?) +(pgbrk | brk) >
<!ATTLIST docate service %service; 'AF'
%docatt;
%secur; >

<!ELEMENT ita - o (partno, refdes) >
<!ATTLIST ita %secur; >

<!ELEMENT oppartic - o (%parazero;) >
<!ATTLIST oppartic tocentry %yesorno; "1"
shortentry %yesorno; "0"
verified %yesorno; "0"
%bodyatt;
%secur; >

<!ELEMENT preptest - o (%parazero;) >
<!ATTLIST preptest tocentry %yesorno; "1"
shortentry %yesorno; "0"
verified %yesorno; "0"
%bodyatt;
%secur; >

<!ELEMENT software - o (%parazero;) >
<!ATTLIST software tocentry %yesorno; "1"
shortentry %yesorno; "0"
verified %yesorno; "0"
%bodyatt;
%secur; >

```
<!ELEMENT statutil      - o (table) >
<!ATTLIST statutil      %secur; >

<!ELEMENT testproc      - o (%parazero;) >
<!ATTLIST testproc      tocentry %yesorno; "1"
                        shortentry %yesorno; "0"
                        verified %yesorno; "0"
                        %bodyatt;
                        %secur; >

<!ELEMENT testtime      - o (%text;) >
<!ATTLIST testtime      %secur; >

<!ELEMENT testwp        - - (%wp;, wpforewd, safesum?, preptest, testproc,
                        swp*)  +(figure | table | foldout) >
<!ATTLIST testwp        chgno NUMBER "0"
                        %bodyatt;
                        %secur; >

<!ELEMENT useapplic      - - ((uut, ate, ita, cpin, testtime)+)  +(ftnote
                        | warning | caution | note) >
<!ATTLIST useapplic      tocentry %yesorno; "1"
                        shortentry %yesorno; "0"
                        verified %yesorno; "0"
                        %bodyatt;
                        %secur; >

<!ELEMENT uut           - o ((partno, refdes) | nomen) >
<!ATTLIST uut           %secur; >

<!-- ***** END OF FILE ***** -->
```
